



**US Army Corps
of Engineers®**
Nashville District

Public Notice

Public Notice No. 04-69

Date: October 13, 2004

Application No. 200400150

Please address all comments to:
Regulatory Branch, 3701 Bell Road, Nashville, TN 37214-2660

**JOINT PUBLIC NOTICE
US ARMY CORPS OF ENGINEERS
TENNESSEE VALLEY AUTHORITY
AND
STATE OF TENNESSEE**

SUBJECT: Proposed Raw Water Intake and Water Treatment Plant at Mile 27.5, Left Bank, French Broad River, and Proposed Submarine Finished Water Pipeline Crossing at Mile 27.1, Left Bank, French Broad River (back chute), in Sevier County, Tennessee

TO ALL CONCERNED: The application described below has been submitted for a Department of the Army Permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) and a Tennessee Valley Authority (TVA) permit pursuant to Section 26a of the TVA Act (16 USC 831y-1)**. Before a permit can be issued, the State of Tennessee, Division of Water Pollution Control, must provide certification, pursuant to Section 401(a)(1) of the CWA, that applicable water quality standards will not be violated. By copy of this notice, the applicant hereby applies for the required certification.

APPLICANT: Sevierville Water Systems
116 Church Street
Sevierville, Tennessee 37862

LOCATION:

- a. Raw Water Treatment Plant and Intake. Mile 27.5, left bank, French Broad River, on the upstream end of McCroskey Island, approximately 0.75 mile below the SR-66 bridge in Sevier County, Tennessee, Lat 35° 55' 51", Long 83° 35' 45", Douglas Dam-TN, USGS Quad Map. (See Exhibit A)
- b. Finished Water Pipeline Crossing. Mile 27.1, left bank, French Broad River (McCroskey Island back channel), approximately one mile below the SR-66 bridge, in Sevier County, Tennessee, Lat 35° 55' 41", Long 83° 36' 05", Douglas Dam-TN, USGS Quad Map. (Exhibit A)

DESCRIPTION: Sevierville Water Systems (SWS) proposes to construct a new 5 million gallon/day (MGD) water treatment plant (WTP), associated intake system and finished water lines in the McCroskey Island area of Sevier County. The plant would include provisions for ease of expansion to 10 MGD and ultimate expansion to 25 MGD. Details of the proposed work are provided below:

a. Raw Water Treatment Plant and Intake (Exhibits B-D). The project consists of an ultra-filtration membrane plant with firm capacity of 5 MGD, utilizing state-of-the-art membrane filtration and control systems, coagulation to remove disinfection by product precursor organics, and raw water pumping and transmission from the French Broad River to the WTP through approximately 1,600' of 36" diameter (diam) high-density polyethylene pipe (HDPE).

SWS chose this particular site for several reasons: proximity to the French Broad River; current property ownership; proximity to McCroskey Island Waste WTP; and location to the north of the existing service area (where most of the system growth is occurring). The purpose of constructing a new WTP facility on McCroskey Island is to provide SWS with a new primary source of potable water. SWS currently provides water to its customers from its existing WTP, which withdraws raw water from the Middle Prong of the Little Pigeon River and is rated for a capacity of 4 MGD. The WTP does not have the hydraulic capacity to increase production at the existing WTP beyond 4 MGD. In addition, the raw water source is not reliable under low flow conditions.

An approximately 1,600' long, 36-inch diam., HDPE pipeline would connect the new French Broad River intake to the Raw Water Pump Station (RWPS). According to SWS, the long length of the intake main is due to: (1) the need to obtain water upstream of the confluence of the Middle Prong of the Little Pigeon River with the French Broad River and (2) the need to obtain sufficient submergence of the intake main and screen. The route of the raw water main would generally run from the intake located on McCroskey Island, cross the Little Pigeon River, and then run upstream in the French Broad River to a point where adequate vertical clearance for the intake screens is possible. The intake would be initially equipped with a single 86" long, 24" diam. barrel-type screen. The elevation of the intake screen centerline would be approximately 857.4' MSL. Concrete anchors would be spaced 20' apart along the raw water intake piping. The anchors will be 7' wide by 3' long by 7' high. There would be four 24" vertical drilled shafts that anchor the end of the intake piping and screens. The majority of the proposed raw water intake line would be installed below the bottom of the river. Throughout construction in the river, all available means will be incorporated to minimize sediment disturbance. The width of excavation will be on average approximately 4.5' to 5', and, depending on the location, approximately 12' or less in depth to accommodate the 36" pipe and anchors. Suitable excavated native material would be used to bed the piping. A minimal amount of rock is anticipated to be encountered during the excavation and installation of the pipe; therefore, in-stream blasting is not expected. Submarine construction would likely be accomplished by use of floating plant.

A RWPS will be located on the eastern shore of McCroskey Island and would contain slots for the ultimate installation of four vertical turbine pumps. The capacity of the pumps would need to provide water for treatment (5 MGD initial capacity) as well as fulfill backwash and/or reject water requirements of the membrane units. As water demand and treatment capacity increase, additional pumps would be added and smaller pumps replaced with larger pumps to handle the future ultimate capacity of 25 MGD.

b. Finished Water Pipeline Crossing (Exhibits E-F). Finished water from the WTP would be pumped through a 36" ductile iron pipeline and connected to the SWS main located on Boyds Creek Highway (SR-338). A submarine river crossing would be necessary across the McCroskey Island back channel (French Broad River). For protection, the 36" carrier pipe would run inside a 48" steel casing pipe. The casing would have a minimum of three feet of cover. Class B riprap would be placed above the pipe and on the disturbed banks for erosion control. Plans of the proposed work are attached to this notice.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b)(1) of the CWA (40 CFR Part 230). A permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers (Corps) is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

An EA will be prepared by this office before a final decision concerning issuance or denial of the requested Department of the Army Permit. The Corps is the lead federal agency and TVA is a cooperating agency in the preparation of this EA.

Upon receipt of the application for a Corps permit, a review of previous Phase I & II archaeological investigations performed on McCroskey Island was conducted followed by a records search of the state site files maintained by the Tennessee Division of Archaeology. With the known presence of a human burial and cultural resources within the confines of McCroskey Island and surrounding areas, the Corps has determined that the potential exists for further unidentified cultural resources and human remains to occur within the permit area and that further investigations, consisting of Phase III archaeological survey and mitigation, is warranted prior to a permit decision. The Corps will be addressing its historic property compliance requirements pursuant to Section 106 of the National Historic Preservation Act. Copies of this notice are being sent to the Tennessee State Historic Preservation Officer and other parties having consultative roles in the Section 106 process.

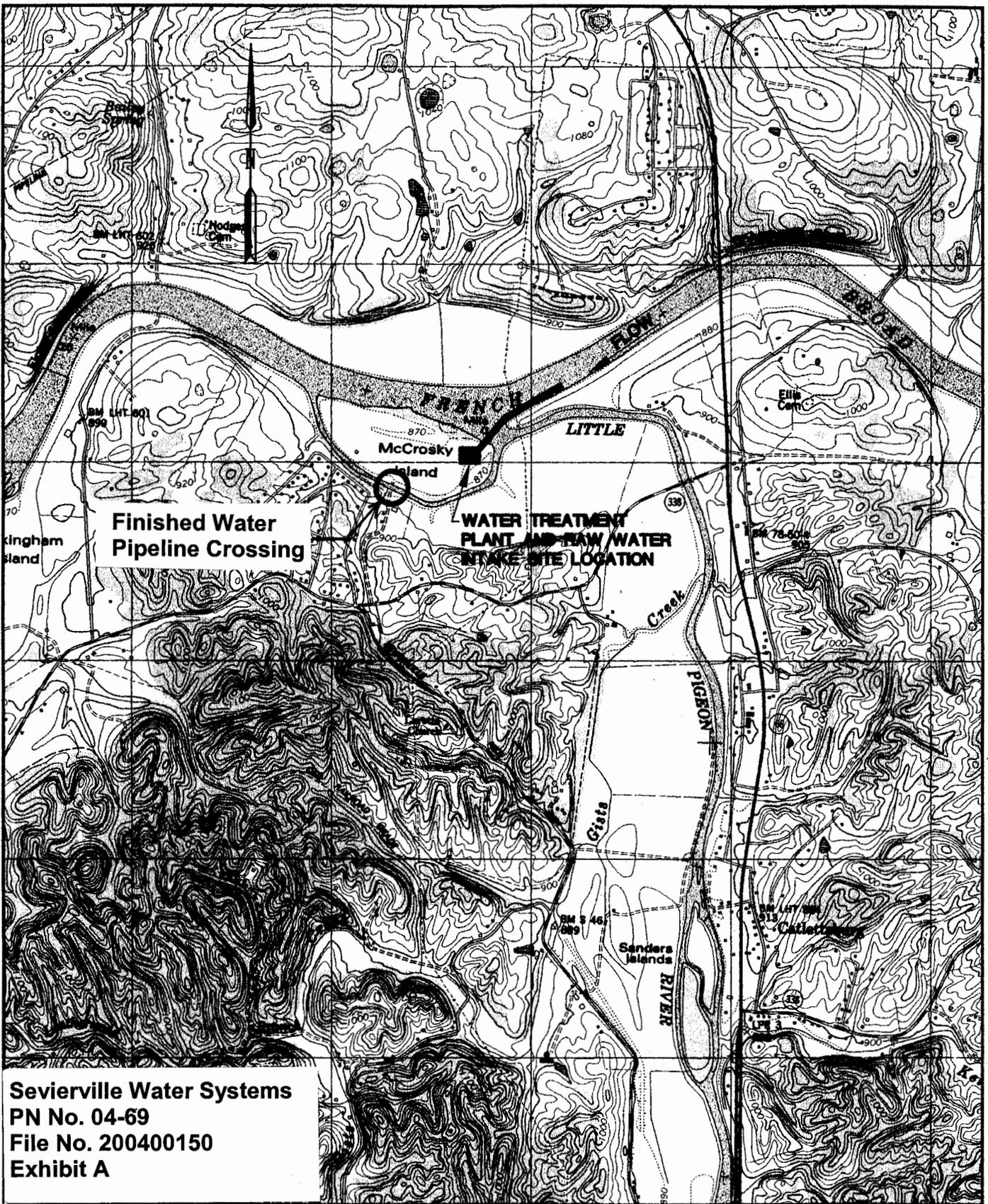
Based on available information, the following federally listed or proposed endangered or threatened species may occur in the area: Snail darter (Percina tanasi), Pink mucket pearly mussel (Lampsilis abrupta) (=L. orbiculata), and Oyster mussel (Epioblasma capsaeoformis). The Corps has determined that the proposed activity has the potential to affect these species. However, at this time, insufficient information exists upon which to base a reasonable decision. We will review additional information, and through informal consultation with the U.S. Fish and Wildlife Service (USFWS), the Corps will determine whether formal consultation is necessary to fulfill our obligations under Section 7 of the Endangered Species Act.

Other federal, state, and/or local approvals required for the proposed work are as follows:

- a. Tennessee Valley Authority (TVA) approval under Section 26a of the TVA Act. In addition to other provisions of its approval, TVA would require the applicant to employ best management practices to control erosion and sedimentation, as necessary, to prevent adverse aquatic impacts.
- b. Water quality certification from the State of Tennessee in accordance with Section 401(a)(1) of the Clean Water Act.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

Written statements received in this office on or before November 12, 2004, will become a part of the record and will be considered in the determination. Any response to this notice should be directed to the Regulatory Branch, Attention: J. Ruben Hernandez, at the above address, telephone (615) 369-7519. It is not necessary to comment separately to TVA since copies of all comments will be sent to that agency and will become part of its record on the proposal. However, if comments are sent to TVA, they should be mailed to the Holston-Cherokee-Douglas Watershed Team, Attn: Mr. Freddie C. Bennett, Suite 218, 4105 Fort Henry Drive, Kingsport, Tennessee 37663-2250. Please send your comments relative to the §401 Water Quality Certification to Mr. Dan Eagar, Tennessee Division of Water Pollution Control, 7th Floor, L&C Annex, 401 Church Street Nashville, Tennessee 37243-1534, telephone (615) 532-0625.



**Finished Water
Pipeline Crossing**

**WATER TREATMENT
PLANT AND RAW WATER
INTAKE SITE LOCATION**

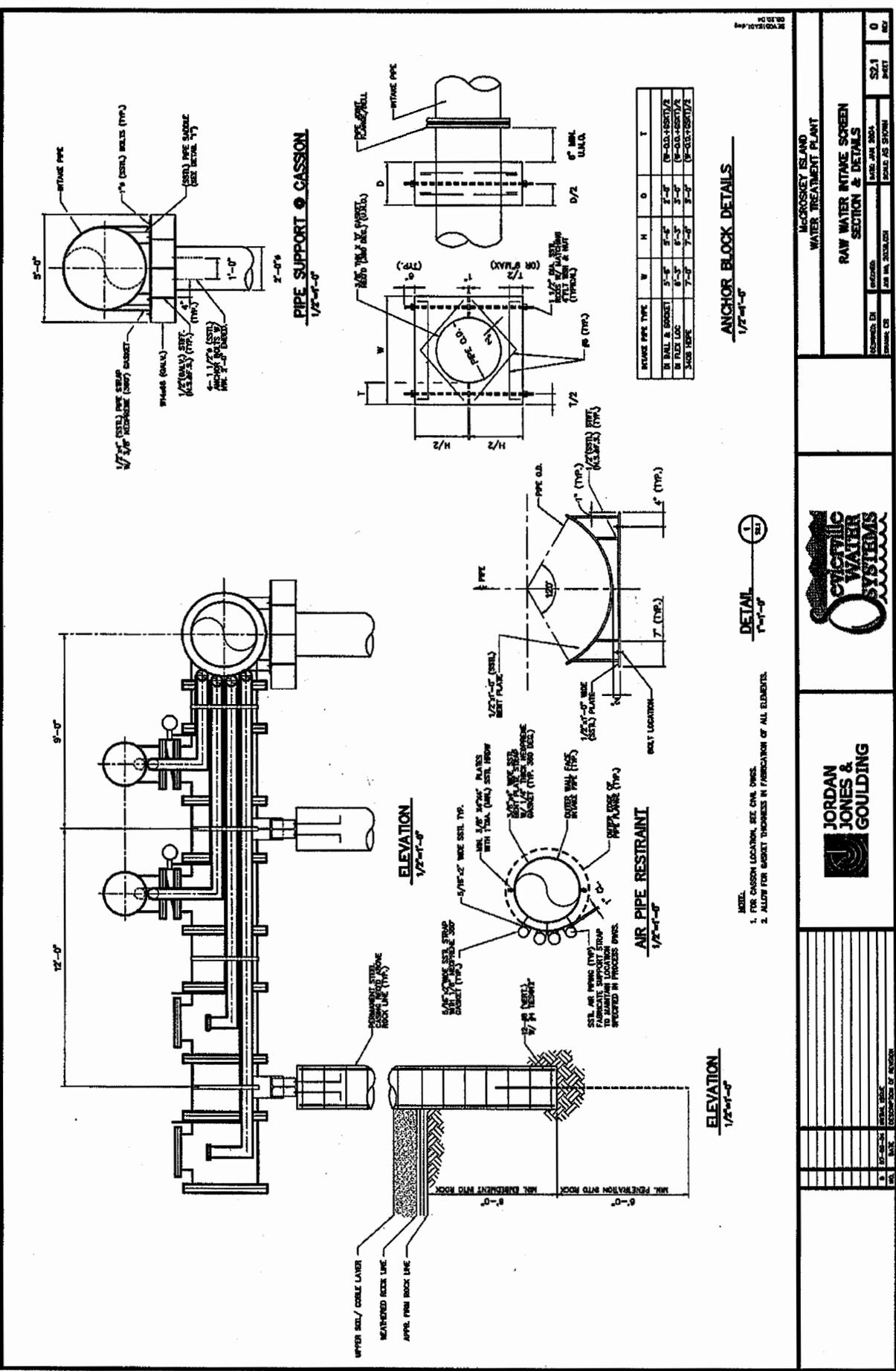
Sevierville Water Systems
 PN No. 04-69
 File No. 200400150
 Exhibit A



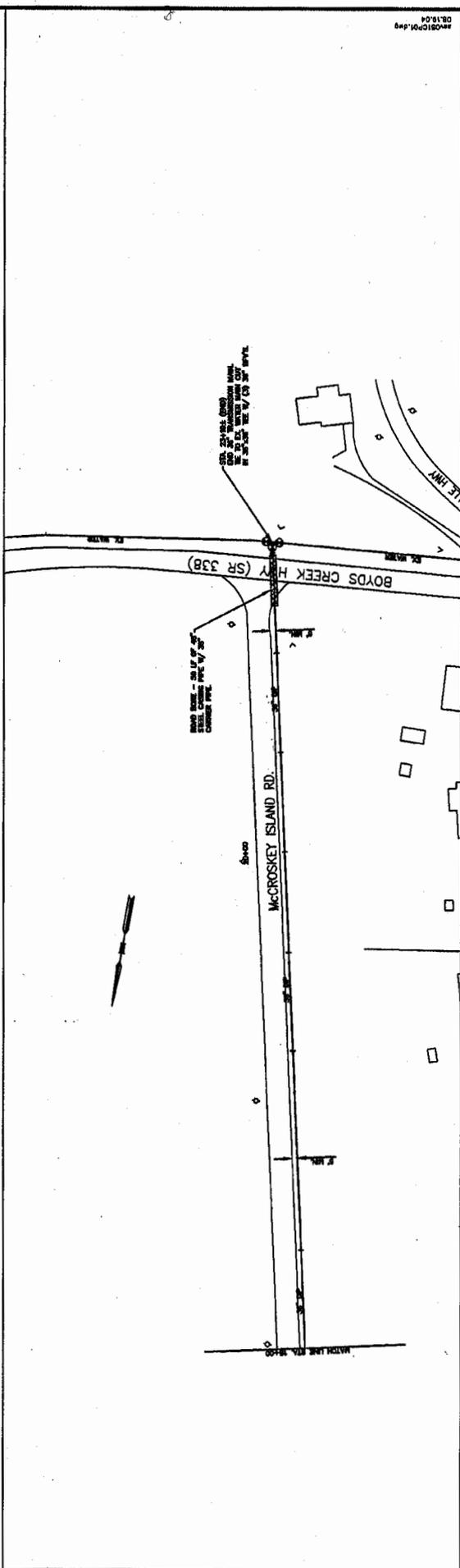
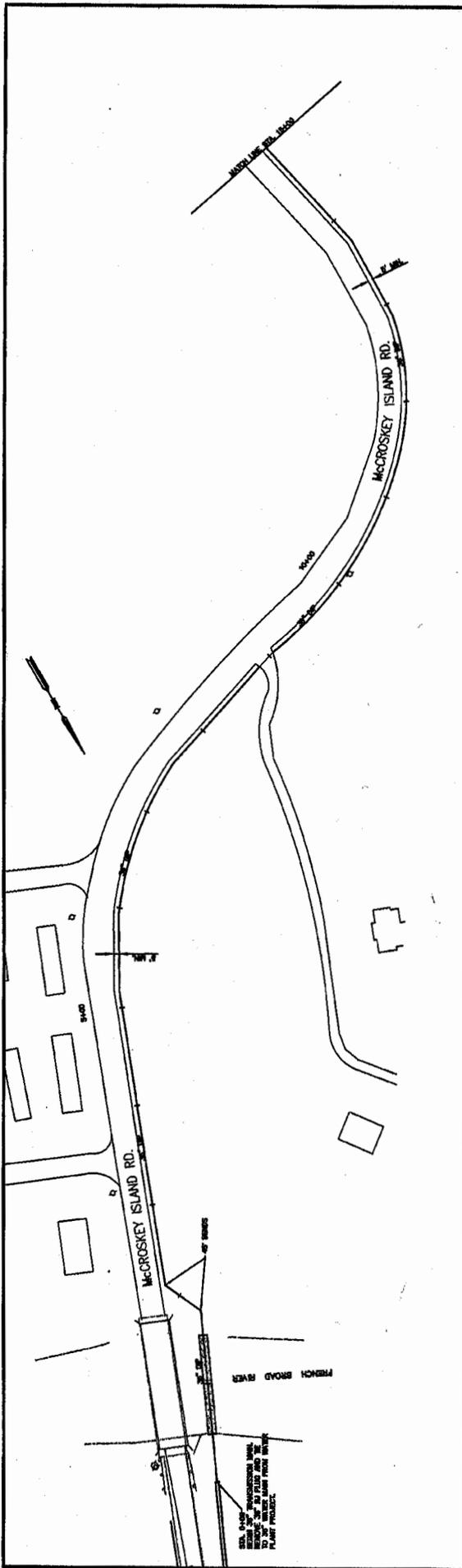
**SEVERVILLE WATER SYSTEMS
 McCROSKEY ISLAND WATER PLANT SITE**

26a PERMIT APPLICATION

DATE : MAY 2004
 SCALE : 1" = 2000'
 JOB NO.: 2039.051



Sevierville Water Systems
 PN No. 04-69
 File No. 200400150
 Exhibit D

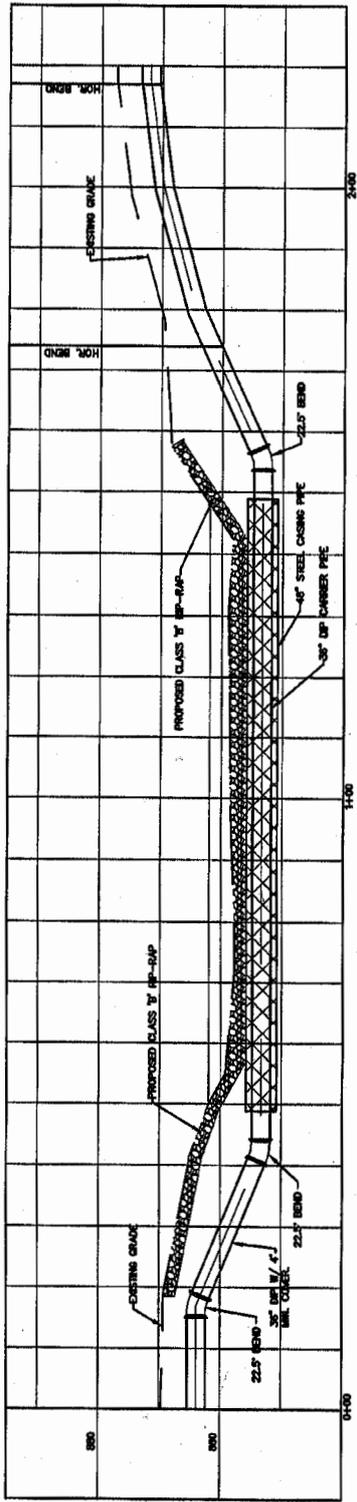


				McCroskey Island Water Treatment Plant UTILITY PLAN	
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Sevierville Water Systems
 PN No. 04-69
 File No. 200400150
 Exhibit E

THIS LINE IS ONE INCH LONG WHEN PLOTTED FULL SCALE

08.19.04



RIVER CROSSING SECTION
 1" = 20' HORIZ.
 1" = 4' VERT.

THIS LINE IS ONE INCH LONG WHEN PLOTTED FULL SCALE

SHARON

MACROSEY ISLAND
 WATER TREATMENT PLANT

UTILITY PROFILE

DESIGNED BY / INCH	DATE: JAN 2004	CPI.1	0
CHECKED BY / INCH	DATE: JAN 2004	SHEET	0
DRAWN BY / INCH	SCALE: AS SHOWN		



DATE	BY	DESCRIPTION

Sevierville Water Systems
 PN No. 04-69
 File No. 200400150
 Exhibit F